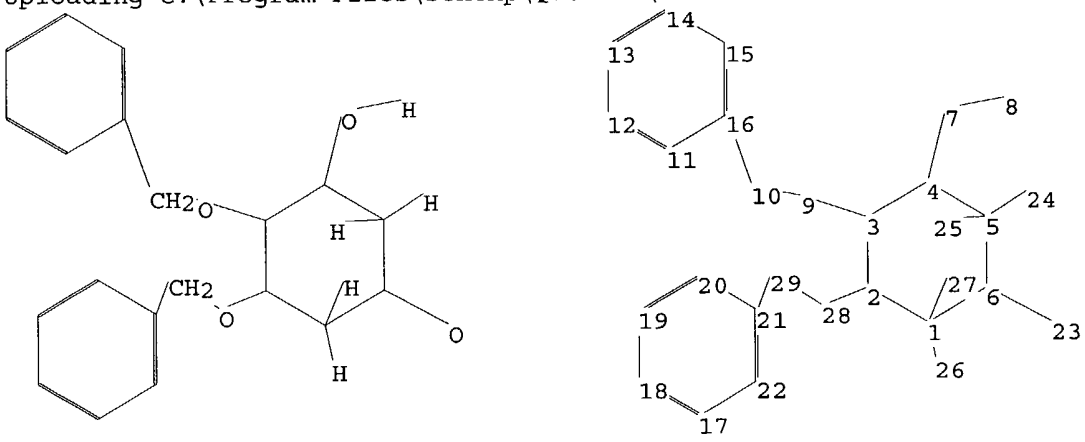
Uploading C:\Program Files\Stnexp\Queries\10722858.str

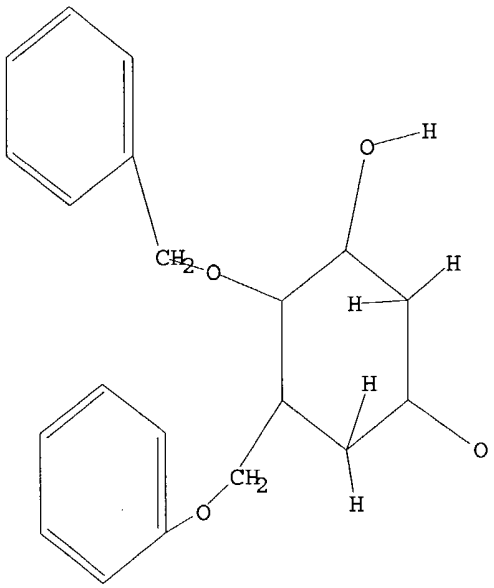


chain nodes :
7 8 9 10 23 24 25 26 27 28 29
ring nodes :
1 2 3 4 5 6 11 12 13 14 15 16 17 18 19 20 21 22
chain bonds :
1-26 1-27 2-28 3-9 4-7 5-24 5-25 6-23 7-8 9-10 10-16 21-29 28-29
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 17-18 17-22
18-19 19-20 20-21 21-22
exact/norm bonds :
1-2 1-6 2-3 2-28 3-4 3-9 4-5 4-7 5-6 6-23
exact bonds :
1-26 1-27 5-24 5-25 7-8 9-10 10-16 21-29 28-29
normalized bonds :
11-12 11-16 12-13 13-14 14-15 15-16 17-18 17-22 18-19 19-20 20-21 21-22

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom
22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS

L1 STRUCTURE UPLOADED

=> d
L1 HAS NO ANSWERS
L1 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s l1
SAMPLE SEARCH INITIATED 07:28:18 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   2988 TO ITERATE

 33.5% PROCESSED    1000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:        56482 TO    63038
PROJECTED ANSWERS:               0 TO        0

L2             0 SEA SSS SAM L1

=> s l1 full
FULL SEARCH INITIATED 07:28:22 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED -  60313 TO ITERATE

100.0% PROCESSED   60313 ITERATIONS                                0 ANSWERS
SEARCH TIME: 00.00.01

L3             0 SEA SSS FUL L1

=>
Uploading C:\Program Files\Stnexp\Queries\10722858.str
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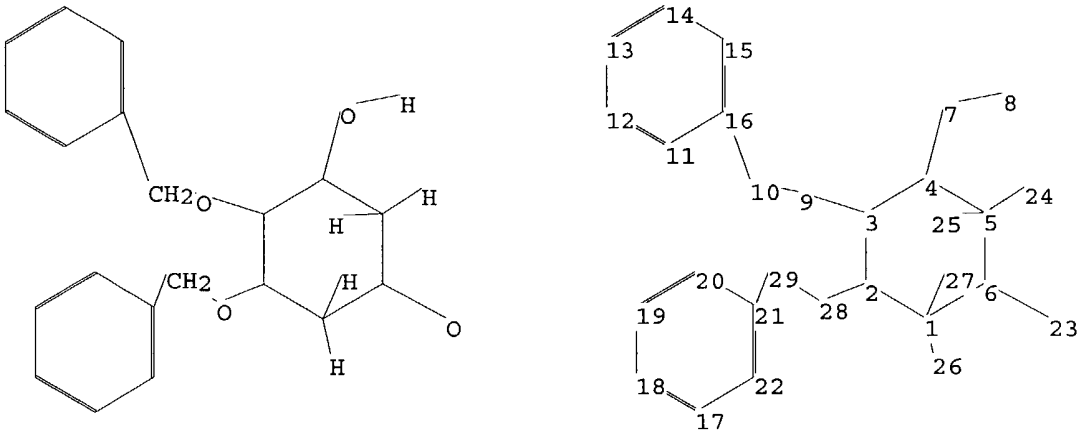
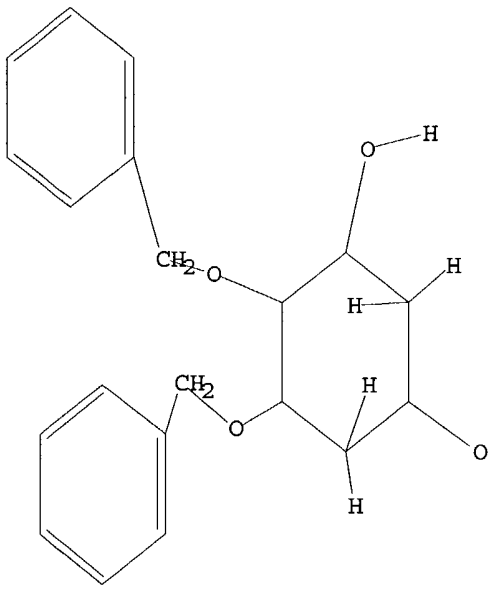


chain nodes :
7 8 9 10 23 24 25 26 27 28 29
ring nodes :
1 2 3 4 5 6 11 12 13 14 15 16 17 18 19 20 21 22
chain bonds :
1-26 1-27 2-28 3-9 4-7 5-24 5-25 6-23 7-8 9-10 10-16 21-29 28-29
ring bonds :
1-2 1-6 2-3 3-4 4-5 5-6 11-12 11-16 12-13 13-14 14-15 15-16 17-18 17-22
18-19 19-20 20-21 21-22
exact/norm bonds :
1-2 1-6 2-3 2-28 3-4 3-9 4-5 4-7 5-6 6-23
exact bonds :
1-26 1-27 5-24 5-25 7-8 9-10 10-16 21-29 28-29
normalized bonds :
11-12 11-16 12-13 13-14 14-15 15-16 17-18 17-22 18-19 19-20 20-21 21-22

Match level :
1:Atom 2:Atom 3:Atom 4:Atom 5:Atom 6:Atom 7:CLASS 8:CLASS 9:CLASS 10:CLASS
11:Atom 12:Atom 13:Atom 14:Atom 15:Atom 16:Atom 17:Atom 18:Atom 19:Atom
20:Atom 21:Atom
22:Atom 23:CLASS 24:CLASS 25:CLASS 26:CLASS 27:CLASS 28:CLASS 29:CLASS

L4 STRUCTURE UPLOADED

=> d
L4 HAS NO ANSWERS
L4 STR



Structure attributes must be viewed using STN Express query preparation.

```
=> s l4
SAMPLE SEARCH INITIATED 07:29:50 FILE 'REGISTRY'
SAMPLE SCREEN SEARCH COMPLETED -   6358 TO ITERATE

 15.7% PROCESSED    1000 ITERATIONS                                  0 ANSWERS
INCOMPLETE SEARCH (SYSTEM LIMIT EXCEEDED)
SEARCH TIME: 00.00.01

FULL FILE PROJECTIONS:  ONLINE  **COMPLETE**
                        BATCH   **COMPLETE**
PROJECTED ITERATIONS:       122381 TO   131939
PROJECTED ANSWERS:               0 TO        0

L5            0 SEA SSS SAM L4

=> s l4 full
FULL SEARCH INITIATED 07:29:55 FILE 'REGISTRY'
FULL SCREEN SEARCH COMPLETED - 127772 TO ITERATE

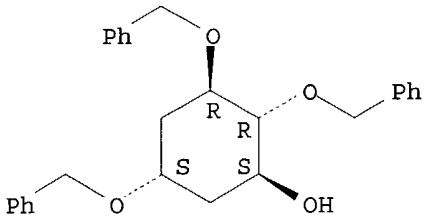
100.0% PROCESSED  127772 ITERATIONS                                4 ANSWERS
SEARCH TIME: 00.00.02

L6            4 SEA SSS FUL L4

=> d scan

L6   4 ANSWERS   REGISTRY  COPYRIGHT 2004 ACS on STN
IN   Cyclohexanol, 2,3,5-tris(phenylmethoxy)-, (1α,2β,3α,5.bet
     a.)- (9CI)
MF   C27 H30 O4

Relative stereochemistry.
```

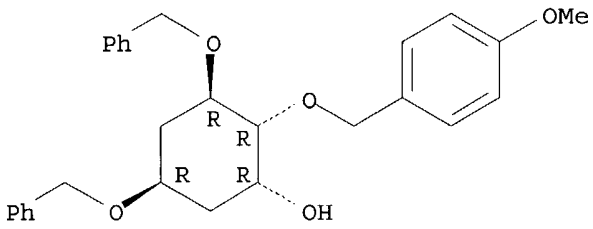


PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

HOW MANY MORE ANSWERS DO YOU WISH TO SCAN? (1):4

L6 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Cyclohexanol, 2-[(4-methoxyphenyl)methoxy]-3,5-bis(phenylmethoxy)-, (1R,2R,3R,5R)- (9CI)
MF C28 H32 O5

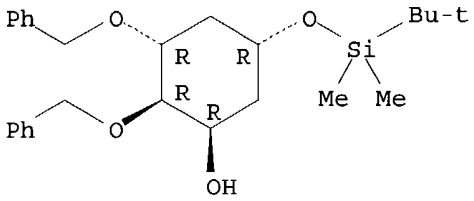
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L6 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Cyclohexanol, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,3-bis(phenylmethoxy)-, (1R,2R,3R,5R)- (9CI)
MF C26 H38 O4 Si

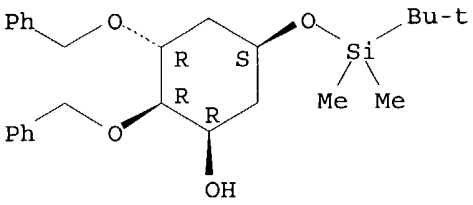
Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

L6 4 ANSWERS REGISTRY COPYRIGHT 2004 ACS on STN
IN Cyclohexanol, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,3-bis(phenylmethoxy)-, (1R,2R,3R,5S)- (9CI)
MF C26 H38 O4 Si

Absolute stereochemistry.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

ALL ANSWERS HAVE BEEN SCANNED

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=> file caplus
COST IN U.S. DOLLARS                                SINCE FILE      TOTAL
                                                      ENTRY    SESSION
FULL ESTIMATED COST                                  311.68     312.79

FILE 'CAPLUS' ENTERED AT 07:30:14 ON 21 APR 2004
USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT.
PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2004 AMERICAN CHEMICAL SOCIETY (ACS)
```

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FILE COVERS 1907 - 21 Apr 2004  VOL 140 ISS 17
FILE LAST UPDATED: 20 Apr 2004  (20040420/ED)

  This file contains CAS Registry Numbers for easy and accurate
  substance identification.

=> s l6
L7            4 L6

=> d ibib abs hitstr 1-4

L7   ANSWER 1 OF 4  CAPLUS  COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER:         2004:220342  CAPLUS
DOCUMENT NUMBER:          140:271144
TITLE:                    Preparation of cyclitols as serine/threonine kinase
                          Akt inhibitors
INVENTOR(S):              Kozikowski, Alan P.; Dennis, Phillip; Sun, Haiying;
                          Brognard, John
PATENT ASSIGNEE(S):       Georgetown University, USA; United States Dept. of
                          Health and Human Services
```

SOURCE: PCT Int. Appl., 41 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

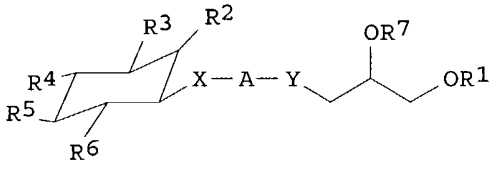
PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 2004022569	A1	20040318	WO 2003-US27607	20030903

W: AE, AG, AL, AM, AT, AU, AZ, BA, BB, BG, BR, BY, BZ, CA, CH, CN, CO, CR, CU, CZ, DE, DK, DM, DZ, EC, EE, ES, FI, GB, GD, GE, GH, GM, HR, HU, ID, IL, IN, IS, JP, KE, KG, KP, KR, KZ, LC, LK, LR, LS, LT, LU, LV, MA, MD, MG, MK, MN, MW, MX, MZ, NI, NO, NZ, OM, PG, PH, PL, PT, RO, RU, SC, SD, SE, SG, SK, SL, SY, TJ, TM, TN, TR, TT, TZ, UA, UG, US, UZ, VC, VN, YU, ZA, ZM, ZW, AM, AZ, BY, KG, KZ, MD, RU

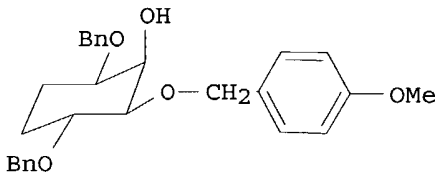
RW: GH, GM, KE, LS, MW, MZ, SD, SL, SZ, TZ, UG, ZM, ZW, AT, BE, BG, CH, CY, CZ, DE, DK, EE, ES, FI, FR, GB, GR, HU, IE, IT, LU, MC, NL, PT, RO, SE, SI, SK, TR, BF, BJ, CF, CG, CI, CM, GA, GN, GQ, GW, ML, MR, NE, SN, TD, TG

PRIORITY APPLN. INFO.: US 2002-407239P P 20020903

GI



I



II

AB Cyclitols I, wherein X and Y are independently selected from the group consisting of O, CF2, CH2, and CHF; A is independently P(O)OH, CH2OOH, and CH(COOH)2; R2 is H, OH, isosteres of OH, C1-C25 alkyloxy, C6-C10 aryloxy, C3-C8 cycloalkyloxy, C3-C8 cycloalkyl C1-C6 alkoxy, C2-C22 alkenyloxy, C3-C8 cycloalkenyloxy, C7-C32 aralkyloxy, C7-C32 alkylaryloxy, C9-C32 aralkenyloxy, and C9-C32 alkenylaryloxy; R3-R6 are independently H, OH, isosteres of OH; and R1 and R7 are independently selected from the group consisting of C1-C25 alkyl, C6-C10 aryl, C3-C8 cycloalkyl, C2-C22 alkenyl, C3-C8 cycloalkenyl, C7-C32 aralkyl, C7-C32 alkylaryl, C9-C32 aralkenyl, and C9-C32 alkenylaryl; with the proviso that (i) when X is O, Y is O or CH2, and R3 is H, at least one of R2 and R4-R6 is not OH; (ii) when A is CH2COOH or CH(COOH)2, X and Y cannot be simultaneously O; and (iii) all of R2-R6 are not simultaneously H, were prepared as serine/threonine kinase Akt inhibitors. The inhibitors can be in the form of a salt also inhibitors of the serine/threonine kinase Akt, pharmaceutical compns. comprising such inhibitors, and a method of preventing or treating a disease or condition in an animal by the use of such inhibitors. Thus, cyclitol II was prepared

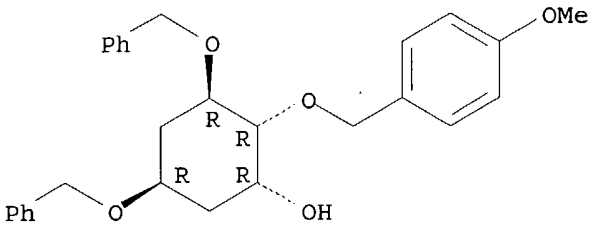
and tested as inhibitor of the serine/threonine kinase Akt for preventing or treating a disease or condition in an animal (no data). He cancer is breast cancer, lung cancer, ovarian cancer, uterine cancer, brain cancer, sarcoma, melanoma, leukemia, lymphoma, colorectal cancer, prostate cancer, or liver cancer. The rheumatol. disease is rheumatoid arthritis or osteoarthritis. The pulmonary disease is chronic obstructive pulmonary disease (COPD).

IT **671193-11-6P**
RL: BSU (Biological study, unclassified); SPN (Synthetic preparation); BIOL (Biological study); PREP (Preparation)
(preparation of cyclitols as serine threonine kinase akt inhibitors)

RN 671193-11-6 CAPLUS

CN Cyclohexanol, 2-[(4-methoxyphenyl)methoxy]-3,5-bis(phenylmethoxy)-, (1R,2R,3R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

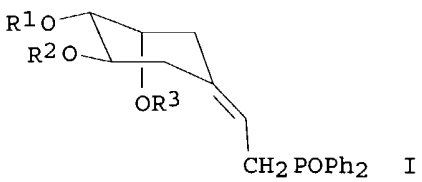


REFERENCE COUNT: 4 THERE ARE 4 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 2 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:282113 CAPLUS
DOCUMENT NUMBER: 138:287899
TITLE: Synthesis of A-ring synthon glycoside phosphine oxide of 19-nor-1α,25-dihydroxyvitamin D3 from (D)-glucose
INVENTOR(S): Deluca, Hector F.; Shimizu, Masato; Yamada, Sachiko
PATENT ASSIGNEE(S): Wisconsin Alumni Research Foundation, USA
SOURCE: U.S. Pat. Appl. Publ., 17 pp.
CODEN: USXXCO
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 2003069212	A1	20030410	US 2002-205453	20020725
US 6683219	B2	20040127		
JP 2003176250	A2	20030624	JP 2002-220721	20020730

PRIORITY APPLN. INFO.: US 2001-308716P P 20010730
US 2002-205453 A 20020725
OTHER SOURCE(S): MARPAT 138:287899
GI



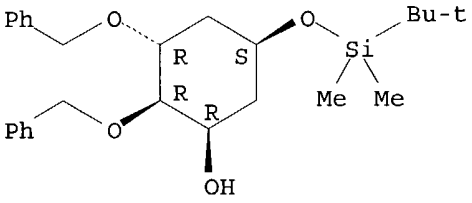
I

AB The present invention provides a method for the synthesis of an A-ring synthon phosphine oxide I, wherein R1-R3 are independently OH protecting group, used in the preparation of 19-nor vitamin D compds., and to novel synthetic intermediates formed during the synthesis. The new method preps. the phosphine oxide from (D)-glucose. Thus, I (R1 = TMS, R2 = R3 = TBS) was prepared from glucose. Some of these compds. exhibit an interesting separation of activities in cell differentiation and calcium regulation. This difference in activity may be useful in the treatment of a variety of diseases (no data). Thus, these compds. are potentially useful as therapeutic agents for the treatment of malignancies, or the treatment of various skin disorders (no data).

IT **506423-07-0P 506423-08-1P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(synthesis of A-ring synthon glycoside phosphine oxide of 19-nor-1α,25-dihydroxyvitamin D3 from (D)-glucose)

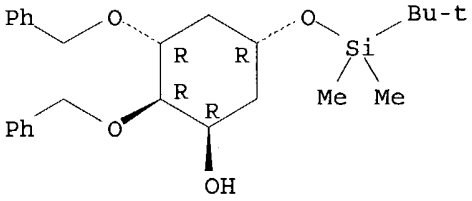
RN 506423-07-0 CAPLUS
CN Cyclohexanol, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,3-bis(phenylmethoxy)-, (1R,2R,3R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



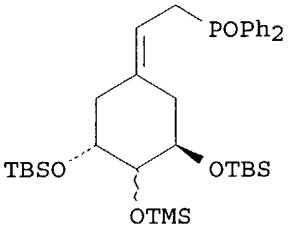
RN 506423-08-1 CAPLUS
CN Cyclohexanol, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,3-bis(phenylmethoxy)-, (1R,2R,3R,5R)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.



L7 ANSWER 3 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 2003:162656 CAPLUS
DOCUMENT NUMBER: 139:53208
TITLE: Novel synthesis of 2-Substituted 19-norvitamin D A-ring phosphine oxide from D-glucose as a building block
AUTHOR(S): Shimizu, Masato; Iwasaki, Yukiko; Shibamoto, Yoshinori; Sato, Miki; DeLuca, H. F.; Yamada, Sachiko
CORPORATE SOURCE: Institute of Biomaterials and Bioengineering, Tokyo Medical and Dental University, Chiyoda-ku, Tokyo, 101-0062, Japan
SOURCE: Bioorganic & Medicinal Chemistry Letters (2003), 13(5), 809-812

CODEN: BMCLE8; ISSN: 0960-894X
PUBLISHER: Elsevier Science Ltd.
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 139:53208
GI



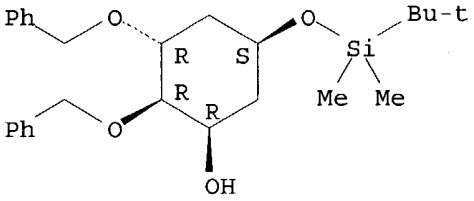
I

AB 19-Norvitamin D A-ring phosphine oxide I was synthesized by a new sequence mode starting from D-glucose as a chiral template. Transformation of the pyranoside ring into I was achieved by the Pd-catalyzed Ferrier rearrangement. I was obtained in an 18% overall yield by this novel cost-effective method.

IT **506423-07-0P**
RL: RCT (Reactant); SPN (Synthetic preparation); PREP (Preparation); RACT (Reactant or reagent)
(preparation of 2-substituted 19-norvitamin D A-ring building block starting from D-glucose)

RN 506423-07-0 CAPLUS
CN Cyclohexanol, 5-[[(1,1-dimethylethyl)dimethylsilyl]oxy]-2,3-bis(phenylmethoxy)-, (1R,2R,3R,5S)- (9CI) (CA INDEX NAME)

Absolute stereochemistry.

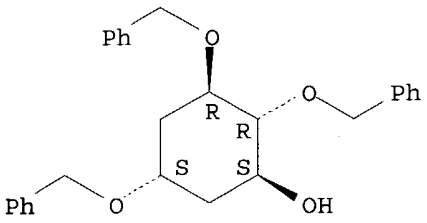


REFERENCE COUNT: 22 THERE ARE 22 CITED REFERENCES AVAILABLE FOR THIS RECORD. ALL CITATIONS AVAILABLE IN THE RE FORMAT

L7 ANSWER 4 OF 4 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1991:492747 CAPLUS
DOCUMENT NUMBER: 115:92747
TITLE: Design and synthesis of 6α-substituted 2β,4α-dihydroxy-1β-phosphoryloxycyclohexanes, potent inhibitors of inositol monophosphatase
AUTHOR(S): Baker, Raymond; Carrick, Carmel; Leeson, Paul D.; Lennon, Ian C.; Liverton, Nigel J.
CORPORATE SOURCE: Neurosci. Res. Cent., Merck Sharp and Dohme Res. Lab., Harlow/Essex, CM20 2QR, UK
SOURCE: Journal of the Chemical Society, Chemical Communications (1991), (5), 298-300
CODEN: JCCCAT; ISSN: 0022-4936
DOCUMENT TYPE: Journal

LANGUAGE: English
OTHER SOURCE(S): CASREACT 115:92747
AB Mol. superimposition studies have led to the design and synthesis of 2β,4α-dihydroxy-6α-[5-(2-hydroxyphenyl)pentyloxy]-1β-phosphoryloxycyclohexane, a potent inhibitor of inositol monophosphatase.
IT **135182-51-3P**
RL: SPN (Synthetic preparation); PREP (Preparation)
(preparation of)
RN 135182-51-3 CAPLUS
CN Cyclohexanol, 2,3,5-tris(phenylmethoxy)-, (1α,2β,3α,5.bet a.)- (9CI) (CA INDEX NAME)

Relative stereochemistry.




```
=> s protecting group (4w) benzyl
         48374 PROTECTING
       1370895 GROUP
        892601 GROUPS
       1919345 GROUP
                 (GROUP OR GROUPS)
         13629 PROTECTING GROUP
                 (PROTECTING(W)GROUP)
        160018 BENZYL
            45 BENZYLS
        160033 BENZYL
                 (BENZYL OR BENZYLS)
L8          73 PROTECTING GROUP (4W) BENZYL

=> s l8 and (alcohol or hydroxy)
        211860 ALCOHOL
        145717 ALCOHOLS
        330956 ALCOHOL
                 (ALCOHOL OR ALCOHOLS)
        534265 ALC
        177960 ALCS
        625279 ALC
                 (ALC OR ALCS)
        742444 ALCOHOL
                 (ALCOHOL OR ALC)
        409582 HYDROXY
             9 HYDROXIES
        409591 HYDROXY
                 (HYDROXY OR HYDROXIES)
L9          20 L8 AND (ALCOHOL OR HYDROXY)

=> d ti 1-20

L9   ANSWER 1 OF 20  CAPLUS  COPYRIGHT 2004 ACS on STN
TI   Highly efficient and convenient deprotection of methoxymethyl ethers and
     esters using bismuth triflate in an aqueous medium
```

L9 ANSWER 2 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI New penam derivative and method of preparation thereof using indium and zinc

L9 ANSWER 3 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of sulfonyl aryl or heteroaryl hydroxamic acid compounds as inhibitors of matrix metalloproteinase

L9 ANSWER 4 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Mild and selective sodium azide mediated cleavage of p-nitrobenzoic esters

L9 ANSWER 5 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Catalytic, Highly Enantioselective Friedel-Crafts Reactions of Aromatic and Heteroaromatic Compounds to Trifluoropyruvate. A Simple Approach for the Formation of Optically Active Aromatic and Heteroaromatic **Hydroxy** Trifluoromethyl Esters

L9 ANSWER 6 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Samarium(0) and 1,1'-Dioctyl-4,4'-Bipyridinium Dibromide: A Novel Electron-Transfer System for the Chemoselective Reduction of Aromatic Nitro Groups

L9 ANSWER 7 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI A mild and selective cleavage of trityl ethers by carbon tetrabromide-methanol

L9 ANSWER 8 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of α-amino-β-sulfonyl hydroxamic acid compounds as matrix metalloprotease inhibitors

L9 ANSWER 9 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI A novel approach towards intermolecular stabilization of para-quinone methides. First complexation of the elusive, simplest quinone methide, 4-methylene-2,5-cyclohexadien-1-one

L9 ANSWER 10 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI On the selective deprotection of trityl ethers

L9 ANSWER 11 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of carbapenem intermediates

L9 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of C-2' hydroxyl-benzyl protected, N-carbamate protected (2R,3S)-3-phenylisoserine for use as intermediates for the synthesis of paclitaxel

L9 ANSWER 13 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Lewis acid-catalyzed deprotection of para-methoxybenzyl ether

L9 ANSWER 14 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Preparation of 2-(2-azetidinon-N-yl)-2- and 3-butenoic acid derivatives and their use in the cephalosporin synthesis

L9 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Trypsin-like protease-inhibiting peptide derivatives, their synthesis and therapeutic use

L9 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Processes for the synthesis of diprotected R(R*,S*)-3,5-dihydroxy-6-oxohexanoate esters as intermediates for antihypercholesterolemics

L9 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Pentapeptides as immunoregulators

L9 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Hard acid and soft nucleophile system. New efficient method for removal of benzyl protecting group

L9 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI Alkyl 3,5-dihydroxy-4-methoxybenzoates and derivatives

L9 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
TI A new synthetic route to substituted mercaptoethylamines. Hydroxyl displacement by thiols

=> d ibib abs hitstr 12

L9 ANSWER 12 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1997:719682 CAPLUS
DOCUMENT NUMBER: 127:346544
TITLE: Preparation of C-2' hydroxyl-benzyl protected, N-carbamate protected (2R,3S)-3-phenylisoserine for use as intermediates for the synthesis of paclitaxel
INVENTOR(S): Sisti, Nicholas J.; Swindell, Charles S.; Chander, Madhavi C.
PATENT ASSIGNEE(S): Napro Biotherapeutics, Inc., USA; Bryn Mawr College
SOURCE: U.S., 9 pp., Cont.-in-part of U.S. Ser. No. 357,507.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 5
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 5684175	A	19971104	US 1995-483081	19950607
EP 1260507	A1	20021127	EP 2002-14256	19940204
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE				
US 5770745	A	19980623	US 1994-357507	19941215
US 5939566	A	19990817	US 1995-483083	19950607
CA 2222421	AA	19961219	CA 1996-2222421	19960607
WO 9640624	A1	19961219	WO 1996-US10025	19960607
W: AL, AM, AT, AU, BB, BG, BR, CA, CN, CZ, EE, FI, GE, HU, IL, IS, JP, KG, KP, KR, LK, LR, LT, LU, LV, MD, MG, MK, MN, MX, NO, NZ, PL, RO, RU, SG, SI, SK, TR, TT, UA, UZ, VN, AM, AZ, BY, KG, KZ, MD, RU				
RW: KE, LS, MW, SD, SZ, UG, AT, BE, CH, DE, DK, ES, FI, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG				
AU 9661112	A1	19961230	AU 1996-61112	19960607
AU 701509	B2	19990128		
EP 837846	A1	19980429	EP 1996-918454	19960607
EP 837846	B1	20011107		
R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, FI				
JP 11514965	T2	19991221	JP 1996-502162	19960607
AT 208373	E	20011115	AT 1996-918454	19960607
ES 2166448	T3	20020416	ES 1996-918454	19960607
US 6262281	B1	20010717	US 1998-20742	19980209
US 6072060	A	20000606	US 1999-253325	19990219
US 6307088	B1	20011023	US 2000-547327	20000411
US 2002052517	A1	20020502	US 2001-863889	20010522
US 6509484	B2	20030121		

PRIORITY APPLN. INFO.:
US 1993-15095 B1 19930205
US 1994-357507 A2 19941215
EP 1994-907973 A3 19940204
US 1995-483081 A 19950607

US 1995-483083 A1 19950607
WO 1996-US10025 W 19960607
US 1998-20742 A3 19980209
US 1999-253325 A3 19990219

OTHER SOURCE(S): MARPAT 127:346544

AB Protected 3-phenylisoserines, (2R,3S)-PhCH(NHCO2R1)CH(OR2)CO2H (R1 = alkenyl, aryl, benzyl; R2 = hydrogenatable **hydroxy protecting group** such as **benzyl** or benzyloxymethyl), were prepared (no preparative examples given) as intermediates for the synthesis of paclitaxel.

=> d ibib abs hitstr 20

L9 ANSWER 20 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1965:51038 CAPLUS
DOCUMENT NUMBER: 62:51038
ORIGINAL REFERENCE NO.: 62:8994e-f
TITLE: A new synthetic route to substituted mercaptoethylamines. Hydroxyl displacement by thiols
AUTHOR(S): Stacy, Gardner W.; Barnett, Buford F.; Strong, Philip L.
CORPORATE SOURCE: Washington State Univ., Pullman
SOURCE: Journal of Organic Chemistry (1965), 30(2), 592-7
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
OTHER SOURCE(S): CASREACT 62:51038

AB A catalytic displacement reaction of the hydroxyl group of ethynyl carbinols by thiols was accompanied by internal hydration of the acetylenic function, which enabled a new synthetic approach to substituted mercaptoethylamines. A β-oxo sulfide was converted into an oxime, HOCMe2C.tplbond.CH → PHCH2SH PhCH2SCMe2Ac → PhCH2SCMe2CMe:NOH → HSCMe2CHMe:NOH → HSCMe2CHMeNH2. The **protecting group benzyl** of the oxime was removed by reaction with Na in liquid NH3 to give an α-thiol oxime, which was reduced with LiAlH4 to yield a substituted mercaptoethylamine, wherein the thiol group was located on a tertiary C atom and the amino group on a secondary C atom, as in the schematic example shown.

=> d ibib abs hitstr 15-19

L9 ANSWER 15 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1995:520428 CAPLUS
DOCUMENT NUMBER: 122:285553
TITLE: Trypsin-like protease-inhibiting peptide derivatives, their synthesis and therapeutic use
INVENTOR(S): Antonsson, Karl Thomas; Bylund, Ruth Elvy; Gustafsson, Nils David; Nilsson, Nils Olov Ingemar
PATENT ASSIGNEE(S): Astra Aktiebolag, Swed.
SOURCE: PCT Int. Appl., 263 pp.
CODEN: PIXXD2
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
WO 9429336	A1	19941222	WO 1994-SE535	19940602

W: AT, AU, BB, BG, BR, BY, CA, CH, CN, CZ, DE, DK, ES, FI, GB, GE, HU, JP, KG, KP, KR, KZ, LK, LU, LV, MD, MG, MN, MW, NL, NO, NZ, PL, PT, RO, RU, SD, SE, SI, SK, TJ, TT, UA, US, UZ, VN

RW: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LU, MC, NL, PT, SE, BF, BJ, CF, CG, CI, CM, GA, GN, ML, MR, NE, SN, TD, TG

TW	403731	B	20000901	TW 1994-83104085	19940505
IL	109634	A1	19990411	IL 1994-109634	19940512
HR	940311	B1	20020228	HR 1994-940311	19940517
CA	2162900	AA	19941222	CA 1994-2162900	19940602
AU	9469869	A1	19950103	AU 1994-69869	19940602
AU	684086	B2	19971204		
BR	9406746	A	19960319	BR 1994-6746	19940602
EP	701568	A1	19960320	EP 1994-918636	19940602
EP	701568	B1	20010425		

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IE, IT, LI, LU, MC, NL, PT, SE

CN	1127509	A	19960724	CN 1994-192799	19940602
CN	1099425	B	20030122		
HU	74739	A2	19970228	HU 1995-3445	19940602
RU	2142469	C1	19991210	RU 1996-101161	19940602
EP	1067136	A1	20010110	EP 2000-121659	19940602

R: AT, BE, CH, DE, DK, ES, FR, GB, GR, IT, LI, LU, NL, SE, MC, PT, IE, SI

AT	200783	E	20010515	AT 1994-918636	19940602
ES	2128277	T3	20010701	ES 1994-918636	19940602
PT	701568	T	20010830	PT 1994-94918636	19940602
JP	3205558	B2	20010904	JP 1995-501665	19940602
PL	181968	B1	20011031	PL 1994-311819	19940602
JP	2001322974	A2	20011120	JP 2001-91958	19940602
JP	2002047264	A2	20020212	JP 2001-158596	19940602
CZ	290104	B6	20020515	CZ 1995-3020	19940602
SK	283150	B6	20030304	SK 1995-1454	19940602
LT	3768	B	19960325	LT 1994-1947	19940603
EE	3264	B1	20000417	EE 1994-456	19941123
US	5602253	A	19970211	US 1995-468046	19950606
US	5723444	A	19980303	US 1995-470277	19950606
US	5780631	A	19980714	US 1995-465916	19950606
US	5783563	A	19980721	US 1995-470258	19950606
US	5856307	A	19990105	US 1995-484427	19950607
US	5939392	A	19990817	US 1995-481811	19950607
NO	9504873	A	19960201	NO 1995-4873	19951130
FI	9505828	A	19951204	FI 1995-5828	19951204
CN	1278530	A	20010103	CN 1999-124859	19991115
GR	3036258	T3	20011031	GR 2001-401107	20010724

PRIORITY APPLN. INFO.:

SE	1993-1916	A	19930603
EP	1994-918636	A3	19940602
JP	1995-501665	A3	19940602
JP	2001-91958	A3	19940602
WO	1994-SE535	W	19940602
US	1994-382036	A1	19940819

AB The invention relates to peptide derivs. which are competitive inhibitors of trypsin-like serine proteases, their synthesis, pharmaceutical compns. containing the compds. as active ingredients, and the use of the compds. as thrombin inhibitors, anticoagulants and anti-inflammatory inhibitors for prophylaxis and treatment of related diseases. Further described are novel compds., the new use of compds. and especially new structural fragments in synthesis of pharmaceutical compds. Numerous peptide derivs. were prepared HO2CCH2-(R)-Cgl-Aze-Pab [Cgl = cyclohexylglycine, Aze = azetidine-2-carboxylic acid, Pab = 4-aminomethyl-1-(N-benzyloxycarbonylamidino)benzene] was prepared by carbodiimide-mediated coupling of Boc-(R)-Cgl-Aze-OH with Pab-Z, removal of the Boc **protecting group**, alkylation with **benzyl** -2-(o-nitrobenzenesulfonyloxy)acetate, removal of the Z **protecting group**, and removal of the **benzyl** group by hydrogenation.

L9 ANSWER 16 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN

ACCESSION NUMBER: 1990:197638 CAPLUS

DOCUMENT NUMBER: 112:197638
TITLE: Processes for the synthesis of diprotected R(R*,S*)-3,5-dihydroxy-6-oxohexanoate esters as intermediates for antihypercholesterolemics
INVENTOR(S): Chen, Kau Ming; Hardtmann, Goetz E.; Kapa, Prasad K.; Lee, George T.; Linder, Jerome; Wattanasin, Sompong
PATENT ASSIGNEE(S): Sandoz Pharmaceuticals Corp., USA
SOURCE: U.S., 23 pp. Cont.-in-part of U.S. Ser. No. 857,689, abandoned.
CODEN: USXXAM
DOCUMENT TYPE: Patent
LANGUAGE: English
FAMILY ACC. NUM. COUNT: 2
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
US 4870199	A	19890926	US 1988-166594	19880310
PRIORITY APPLN. INFO.:			US 1986-857689	19860430
			US 1987-23079	19870306

OTHER SOURCE(S): MARPAT 112:197638
AB R[R*,S*]-OHCCH(OR1)CH2CH(OR2)CH2CO2R3 (I; R1, R2 = **protecting group**; R3 = alkyl, allyl, **benzyl**), useful as intermediates for HMG CoA reductase inhibitors trans-R4HC:CHCH(OH)CH2CH(OH)CH2CO2H (II) [R4 = (substituted) Ph, biphenylyl, indolyl, diphenylimidazolyl, diphenylpyrazolyl, etc.], were prepared, e.g., from S-Ph3COCH2CH(OH)CH2CO2H via (1) condensation with Mg(O2CCH2CO2R3)2, (2) stereoselective reduction of the resulting S-Ph3COCH2CH(OH)CH2COCH2CO2R3 to the corresponding R[R*,S*]-diol, (3) protection of the diol, (4) cleavage of the triphenylmethyl group, and (5) oxidation to the aldehyde. Thus, S-Ph3COCH2CH(OH)CH2CO2Me (preparation given) in THF was added to a mixture of MeCO2CMe3 and Li diisopropylamide in THF at -62 to -60° over 25 min. The mixture was stirred at that temperature for 1 h followed by gradual warming to give 87.1% S-Ph3OCH2CH(OH)CH2COCH2CO2CMe3. The latter was reduced with Et3B and NaBH4 in MeOH/THF to give the corresponding diol with a 69:1 ratio of R[R*,S*]- to S[R*,R*]-stereoisomers. The diol was bis-silylated with Me3CSiPh2Cl, detritylated with CF3CO2H, and oxidized with pyridinium chlorochromate to give R[R*,S*]-OHCCH(OSiPh2CMe3)CH2CH(OSiPh2CMe3)CH2CO2CMe3. Several II were prepared from I and phosphonate reagents.

L9 ANSWER 17 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1986:573053 CAPLUS
DOCUMENT NUMBER: 105:173053
TITLE: Pentapeptides as immunoregulators
INVENTOR(S): Koenig, Wolfgang; Geiger, Rolf; Obermeier, Rainer; Muellner, Hubert
PATENT ASSIGNEE(S): Hoechst A.-G. , Fed. Rep. Ger.
SOURCE: Ger. Offen., 16 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 3421614	A1	19851212	DE 1984-3421614	19840609
EP 164654	A2	19851218	EP 1985-106652	19850530
EP 164654	A3	19880113		
R: AT, BE, CH, DE, FR, GB, IT, LI, NL, SE				
DK 8502549	A	19851210	DK 1985-2549	19850606
AU 8543423	A1	19851212	AU 1985-43423	19850607

AU 588237	B2	19890914		
JP 61001700	A2	19860107	JP 1985-122858	19850607
ZA 8504331	A	19860226	ZA 1985-4331	19850607
ES 543973	A1	19860801	ES 1985-543973	19850607
US 4658016	A	19870414	US 1985-742441	19850607

PRIORITY APPLN. INFO.: DE 1984-3421614 19840609
OTHER SOURCE(S): CASREACT 105:173053
AB H-Arg-Lys X-Val-Y [X = L- or D-glutamic acid or α-aminoadipic acid residue; Y = L- or D-Tyr, -Trp ester or amide residue, etc.], useful as immunoregulators (no data), were prepared via condensation of H-Arg(Z1)2-Lys(Z1)-X(Bzl)-Val-OH [Z1 = amino-**protecting group** of the **benzyl** type] with the appropriate tyrosine or tryptophan ester or amide and subsequent deprotection by hydrogenolysis, etc. Thus, N-ethylmorpholine and dicyclohexylcarbodiimide were added to a mixture of Z-Arg(Z2)-Lys(Z)-Glu(OBzl)-Val-OH, H-Tyr-OBzl·Tos-OH (Z = PhCH2O2C, Bzl = PhCH2), and 3-**hydroxy**-4-oxo-3,4-dihydro-1,2,3-benzotriazine at 0° and the resulting mixture stirred for 2 h at 0° and then 4 h at room temperature to give 81% Z-Arg(Z2)-Lys(Z)-Glu(OBzl)-Val-Trp-OH·AcOH.

L9 ANSWER 18 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1979:202998 CAPLUS
DOCUMENT NUMBER: 90:202998
TITLE: Hard acid and soft nucleophile system. New efficient method for removal of benzyl protecting group
AUTHOR(S): Fuji, Kaoru; Ichikawa, Kohei; Node, Manabu; Fujita, Eiichi
CORPORATE SOURCE: Inst. Chem. Res., Kyoto Univ., Uji, Japan
SOURCE: Journal of Organic Chemistry (1979), 44(10), 1661-4
CODEN: JOCEAH; ISSN: 0022-3263
DOCUMENT TYPE: Journal
LANGUAGE: English
AB Aliphatic and aromatic benzyl ethers were cleaved on treatment with a hard acid, F3B.OEt2, and a soft nucleophile, EtSH or HSCH2CH2SH, to give parent **alcs.** and phenols, resp. Competitive debenzylation expts. showed that the coordination of a hard acid (pulling factor) is more important than the nucleophilic attack of a soft nucleophile to the carbon atom (pushing factor) in this reaction. Thus, benzyl 2-naphthyl ether was treated with F3B.OEt2 and EtSH at room temperature for 0.8 h to give 92% 2-naphthol. Treatment of estradiol dibenzyl ether (I) with F3B.OEt2 and EtSH in CH2Cl2 at room temperature for 3 h gave 26.39% I, 11.7% estradiol 17-monobenzyl ether, 17.5% 3-monobenzyl ether, and 30.1% estradiol.

L9 ANSWER 19 OF 20 CAPLUS COPYRIGHT 2004 ACS on STN
ACCESSION NUMBER: 1969:524920 CAPLUS
DOCUMENT NUMBER: 71:124920
TITLE: Alkyl 3,5-dihydroxy-4-methoxybenzoates and derivatives
INVENTOR(S): Haeusermann, Werner; Kaiser, Ado; Scheer, Marcel
PATENT ASSIGNEE(S): Hoffmann-La Roche, F., und Co., A.-G.
SOURCE: Ger. Offen., 27 pp.
CODEN: GWXXBX
DOCUMENT TYPE: Patent
LANGUAGE: German
FAMILY ACC. NUM. COUNT: 1
PATENT INFORMATION:

PATENT NO.	KIND	DATE	APPLICATION NO.	DATE
DE 1902583	A	19690828	DE 1969-1902583	19690120
NL 6818531	A	19690812	NL 1968-18531	19681223
US 3622610	A	19711123	US 1969-791793	19690116
BE 727979	A	19690806	BE 1969-727979	19690206
FR 2001654	A1	19690926	FR 1969-2934	19690207

US 3766245 A 19731016 US 1971-121158 19710304
PRIORITY APPLN. INFO.: CH 1968-1972 19680209
US 1969-791793 19690116

GI For diagram(s), see printed CA Issue.

AB The title compds. (I) are prepared by the selective removal of the protecting group from C-4 of an alkyl 3,4,5-tris(substituted sulfonyloxy) benzoate in liquid NH3, methylation, and substitution of the **protecting groups** with **benzyl** halides in the presence of base; or by selective protection of the OH groups at C-3 and C-5 of alkyl gallates with alkenyl ethers, preferably vinyl Et ether or dihydropyran (II), methylation at C-4, acid hydrolysis to give the 3,5-dihydroxy analog, and benzylation to give I. These compds. are intermediates in the preparation of medicinals. Thus, 60 g. of Me 3,4,5-tris(phenylsulfonyloxy)benzoate, m. 119-21°, prepared by treating Me gallate (III) with PhSO2Cl in C5H5N, is heated 14 hours at 23° with 300 ml. liquid NH3 in an autoclave, the NH3 evaporated, and the residue heated at 50° with 300 ml. MeOH and 400 ml. H2O, cooled to 10°, and the solid thus formed suspended at 50° in 200 ml. H2O. The suspension is acidified to pH 2 with 2N H2SO4, cooled, and filtered to give Me 3,5-bis(phenylsulfonyloxy)-4-hydroxybenzoate (IV), m. 157-60° (MeOH). A mixture of 30.9 g. IV in 288 ml. HCONMe2, 11.5 g. Me2SO4, and 36 g. K2CO3 is stirred at 70° 14 hrs., the insol. materials filtered off, the solvents evaporated in vacuo and the oily residue crystallized from warm 2N HOAc to give IV 4-methoxy analog (V), m. 105-7° (MeOH). V (15 g.) is stirred at reflux under Ar 24 hrs. with 300 ml. MeOH, 20 g. BzCl, and 22 g. K2CO3 to give I Me ester (VI), m. 114-16°. Similarly prepared are the following compds. (m.p. given): Me 3,4,5-tris(methylsulfonyloxy)benzoate, 159-62° (CH2Cl2-MeOH); Me 4-**hydroxy**-3,5-bis(methylsulfonyloxy)benzoate, 143-6° (MeOH); and Me 3,5-bis(methylsulfonyloxy)-4-methoxybenzoate, 95-8° (EtOAcEt2O). The reaction of 20 g. III with 38 g. II and 0.05 ml. POCl3 in 40 ml. tetrahydrofuran gives a solution of Me 3,5-bis(tetrahydro-pyranyloxy)-4-methoxybenzoate which is heated 12 hrs. at 70° under N with K2CO3 and Me2SO4 in 400 ml. HCONMe2, the solution evaporated, and the residue refluxed 1 hour with 1 g. HO2CCO2H in 100 ml. MeOH to give Me 4-O-methylgallate (VIII). To a stirred solution of VIII and K2CO3 in HCONMe2 is added PhCH2Cl and the mixture stirred 2.5 hrs. at 90-5° to give VI, m. 120-2°. Similarly prepared is Me 3,5-bis(ethoxyethoxy)-4-methoxybenzoate (a dark red liquid), from which are prepared VII, m. 135-8°, and VI. Reduction of V with LiAlH4 in tetrahydrofuran gives 3,5-bis(benzyloxy)-4-methoxybenzyl **alc.**, m. 100°, which with SOCl2 gives the chloride (IX), m. 76-8°. A solution of (EtO2C)2CHNHAc in HCONMe2 is added slowly to a vigorously stirred suspension of NaH in HCONMe2, the resulting solution added slowly to a solution of IX in HCONMe2, and after 3-5 hrs. stirring the solution acidified to give di-Et [3,5-bis(benzyloxy)-4-methoxybenzyl]acetamidomalonate, m. 104-6°. This compound is refluxed 6-7 hrs. with aqueous NaOH and the solution acidified to pH 1 to give (±)-3,5-bis(benzyloxy)-4-methoxyphenyl-N-acetylalanine, m. 146-7°. Hydrogenation with Pd/C in EtOH followed by refluxing 4-5 hrs. with 2N HCl gives (±)-(3,5-dihydroxy-4-methoxyphenyl)-alanine, m. 272-5°, which contains 1.5 mole H2O of crystallization The anhydrous amino acid (X), obtained on heating in high vacuum at 100°, is very hygroscopic and has a blood pressure lowering effect.

=> file beilstein

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FILE 'BEILSTEIN' ENTERED AT 07:44:03 ON 21 APR 2004
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FILE RELOADED ON OCTOBER 20, 2002
FILE LAST UPDATED ON MARCH 30,2004

FILE COVERS 1771 TO 2003.
*** FILE CONTAINS  8,932,479 SUBSTANCES ***

>>> PLEASE NOTE: Reaction data and substance data are stored in
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    Reaction data for BEILSTEIN compounds may be displayed
    immediately with the display codes PRE (preparations) and REA
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    For more detailed reaction searches BRNs can be selected from
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    partner BRNs - Reactant (RX.RBRN) or Product BRN (RX.PBRN).
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     FILE 'STNGUIDE' ENTERED AT 07:25:33 ON 21 APR 2004

     FILE 'HOME' ENTERED AT 07:25:37 ON 21 APR 2004

     FILE 'REGISTRY' ENTERED AT 07:28:05 ON 21 APR 2004
L1             STRUCTURE UPLOADED
L2           0 S L1
L3           0 S L1 FULL
L4             STRUCTURE UPLOADED
L5           0 S L4
L6           4 S L4 FULL

     FILE 'CAPLUS' ENTERED AT 07:30:14 ON 21 APR 2004
L7           4 S L6
L8          73 S PROTECTING GROUP (4W) BENZYL
L9          20 S L8 AND (ALCOHOL OR HYDROXY)

     FILE 'BEILSTEIN' ENTERED AT 07:44:03 ON 21 APR 2004

=> s l4 full
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FULL SEARCH INITIATED 07:54:41 FILE 'BEILSTEIN'
FULL SCREEN SEARCH COMPLETED - 66555 TO ITERATE

50.5% PROCESSED 33580 ITERATIONS 0 ANSWERS

89.5% PROCESSED 59560 ITERATIONS 2 ANSWERS

100.0% PROCESSED 66555 ITERATIONS 2 ANSWERS
SEARCH TIME: 00.00.47

L10 2 SEA SSS FUL L4

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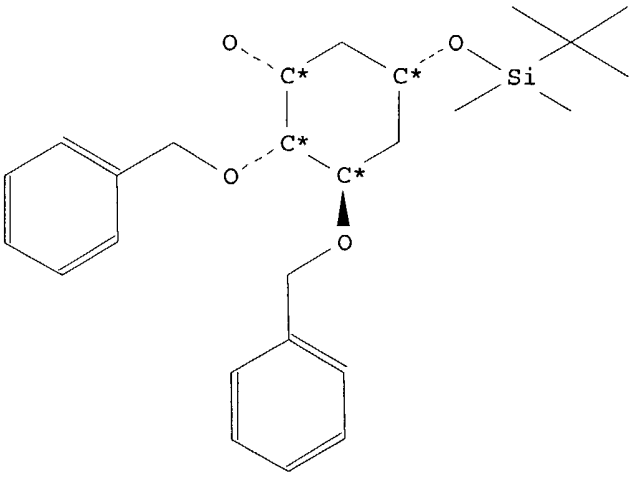
L10 ANSWER 1 OF 2 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

Beilstein Records (BRN):	9356951
Chemical Name (CN):	2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanol
Autonom Name (AUN):	2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanol
Molec. Formula (MF):	C26 H38 O4 Si
Molecular Weight (MW):	442.67
Lawson Number (LN):	6630, 5228, 3798, 3777
File Segment (FS):	Stereo compound
Compound Type (CTYPE):	isocyclic
Constitution ID (CONSID):	7895130
Tautomer ID (TAUTID):	8767133
Entry Date (DED):	2003/07/25
Update Date (DUPD):	2003/07/25



Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1

CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	4
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
ED	Entry Date	1
UPD	Update Date	1

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	2
RXREA	Substance is Reaction Reactant	1
RXPRO	Substance is Reaction Product	1

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L10 ANSWER 1 OF 2 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

Reaction:
RX

Reaction ID (.ID):	9282856
Reactant BRN (.RBRN):	9355400
Reactant (.RCT):	2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanone
Product BRN (.PBRN):	9356951
Product (.PRO):	2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanol
No. of React. Details (.NVAR):	1

Reaction Details:
RX

Reaction RID (.RID):	9282856.1
Reaction Classification (.CL):	Preparation
Yield (.YDT):	95 percent (BRN=9356951)
Reagent (.RGT):	L-Selectride
Solvent (.SOL):	tetrahydrofuran

Reference(s):

1. Shimizu, Masato; Iwasaki, Yukiko; Shibamoto, Yoshinori; Sato, Miki; DeLuca, H. F.; Yamada, Sachiko, Bioorg.Med.Chem.Lett., CODEN: BMCLE8, 13(5), <2003>, 809 - 812; BABS-6388022

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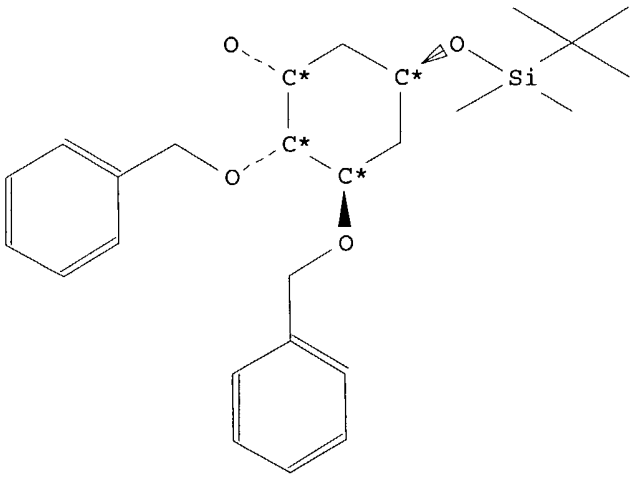
L10 ANSWER 2 OF 2 BEILSTEIN COPYRIGHT 2004 BEILSTEIN MDL on STN

Beilstein Records (BRN):	9356950
Chemical Name (CN):	2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanol
Autonom Name (AUN):	2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanol
Molec. Formula (MF):	C26 H38 O4 Si
Molecular Weight (MW):	442.67
Lawson Number (LN):	6630, 5228, 3798, 3777
File Segment (FS):	Stereo compound

Compound Type (CTYPE): isocyclic
Constitution ID (CONSID): 7895130
Tautomer ID (TAUTID): 8767132
Entry Date (DED): 2003/07/25
Update Date (DUPD): 2003/07/25



Field Availability:

Code	Name	Occurrence
BRN	Beilstein Records	1
CN	Chemical Name	1
AUN	Autonomname	1
MF	Molecular Formula	1
FW	Formular Weight	1
LN	Lawson Number	4
FS	File Segment	1
CTYPE	Compound Type	1
CONSID	Constitution ID	1
TAUTID	Tautomer ID	1
ED	Entry Date	1
UPD	Update Date	1

This substance also occurs in Reaction Documents:

Code	Name	Occurrence
RX	Reaction Documents	1
RXPRO	Substance is Reaction Product	1

Reaction:
RX
Reaction ID (.ID): 9282855
Reactant BRN (.RBRN): 9355399
Reactant (.RCT): 2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanone
Product BRN (.PBRN): 9356950
Product (.PRO): 2,3-bis-benzyloxy-5-(tert-butyl-dimethyl-silanyloxy)-cyclohexanol

No. of React. Details (.NVAR): 1

Reaction Details:
RX
Reaction RID (.RID): 9282855.1
Reaction Classification (.CL): Preparation
Reagent (.RGT): L-Selectride
Solvent (.SOL): tetrahydrofuran
Reference(s):
1. Shimizu, Masato; Iwasaki, Yukiko; Shibamoto, Yoshinori; Sato, Miki; DeLuca, H. F.; Yamada, Sachiko, Bioorg.Med.Chem.Lett., CODEN: BMCLE8, 13(5), <2003>, 809 - 812; BABS-6388022

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Executing the logoff script...